

95% CI=0.41-0.52; $p<0.0001$). **CONCLUSIONS:** Outpatient follow-up within 7 days after hospitalization for mental illness was associated with statistically significant lower likelihood of 30-day re-admission.

PHS175 DECREASING EBM ORDER SET REVIEW AND APPROVAL CYCLE TIME

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OBJECTIVES: Problems were lack of a coordinated approach to review and approval of order sets across the 4-hospital division; lack of consistent formal review process; wide variability in utilization of order sets, and therefore opportunities for errors and misalignment with regulatory compliance. Order set review and approval cycle time (defined as from the time an order set is drafted or received from the system level to when the approval bodies have approved it and it is ready for build, QA, and implementation) was also lengthy, impacting key stakeholder satisfaction and deployment of order sets for Computerized Physician Order Entry (CPOE). Objectives were to create one improved process for all four hospitals within the division, with 100% of new order sets compliant with the improved process going forward, process cycle time decreased to less than 60 days initially, and an increase in staff understanding of terms. **METHODS:** Methods utilized to improve the process included Lean Six Sigma tools such as project charter, Voice of the Customer (VOC), stakeholder analysis, communication plans, SIPOC, elevator speeches, project work plan, Value Stream Mapping of the current and future processes, data definitions and collection plan, data analysis including XmR control charts and capability analyses, fishbone/cause and effect diagram, Improvement Plan, Control Plan, and computer-based learning of order set terminology. **RESULTS:** Following successful phased implementation of the improved process, results were a decrease in cycle time from an average of 77.1 days at baseline to an average of 18.1 days in the post-improvement data collection period. **CONCLUSIONS:** In addition to decreased cycle time, the benefits of an improved process to review and approve order sets include decreased colleague time spent on the process, increased colleague understanding of terms and process due to developed education, increased goodwill with physicians due to more timely approval of requested order sets, potential decrease in regulatory issues and increase in quality of care, and improved CPOE adoption.

PHS176 PATIENT VALUATION OF DIFFERENT APPROACHES TO MENTAL HEALTH AND SUBSTANCE USE DISORDER TREATMENT

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OBJECTIVES: Treatment rates for mental health and substance use disorder (MH/SUD) conditions are low in the U.S. We assessed consumers' monetary valuation of primary care and collaborative care models for treating MH/SUD relative to usual care as a potential strategy for improving treatment rates. **METHODS:** We conducted a national, survey-embedded randomized vignette experiment of individuals with untreated MH/SUD in 2013. 58,928 adults were screened online and categorized as meeting criteria for either drug abuse (N=418) or alcohol abuse (N=698) based on DSM-IV criteria, or a mental health disorder based on a positive K6 score (N=1,030). The 2,146 participants were randomized to view one of three treatment vignettes: usual care (N=726), primary care (N=697), or collaborative care (N=723). Participants were asked whether they would be willing to enter treatment first if it were free to them, and then if they had to pay (for those initially indicating they were willing, randomly assigned as \$10, \$30 or \$50) or were paid (for those initially indicating they were not willing, randomly assigned in \$5 increments between \$5 and \$25). Responses were aggregated to calculate, for each treatment approach, an inverse demand function (i.e., proportion of all participants willing to enter treatment at each price point). After adjusting for MH/SUD condition, we fit linear regression lines through the inverse demand curves. Participants' average incremental value was calculated as the horizontal distance between the linearized inverse demand functions. **RESULTS:** Respondents valued primary care over usual care by \$9.00 (95% confidence interval [CI]: \$2.97, \$15.04; $p=0.003$), and they valued collaborative care over usual care by \$5.85 (95% CI: -\$0.14, \$11.85; $p=0.056$). **CONCLUSIONS:** Our results suggest that low treatment rates for MH/SUD may be addressed by increasing the availability of primary care and collaborative care treatment models, which are somewhat more appealing to consumers than usual care.

PHS178 HOSPITAL COST AND QUALITY TRENDS BEFORE AND AFTER ACO ADOPTION

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OBJECTIVES: Providers who have had favorable cost and quality trends may be more likely to form Accountable Care Organizations (ACOs) because they expect to profit from changes that are already underway within their organization. We examine trends in hospital cost per discharge and in-hospital mortality rates among hospitals that formed ACOs and those that did not, incorporating several years of data preceding ACO formation. **METHODS:** We compared growth rates in cost per discharge and in-hospital mortality rates for select conditions. Data were from 2008 to 2011 (pre-ACO) and 2011 to 2012 (post-ACO) for hospitals that did and did not implement ACOs. We also explored whether there were distinct trends based on ACO leadership structure. **RESULTS:** Between 2008 and 2011, the average rate of growth in cost per discharge for hospitals that adopted ACOs was less than one-third of the rate among hospitals that remained unaffiliated (0.59% vs 2.02%). Among ACOs in which the hospital assumed a leadership role, mean cost per discharge declined during the pre-ACO period at an average rate of 0.55% for hospital-led ACOs and 1.52% for jointly-led ACOs. Cost per discharge during the post-ACO period grew at a rate of 1.99% among ACO hospitals and 1.02% among non-ACO hospitals. Hospital-led

ACOs experienced a 1.95% increase in cost per discharge between 2011 and 2012, while cost per discharge among jointly-led ACOs fell by only 1.27%. Analysis of in-hospital mortality rates did not reveal persistent trend differences. **CONCLUSIONS:** Hospitals that adopted the ACO model had more favorable cost trends between 2008 and 2011 than hospitals that did not adopt the model, which suggests non-random selection of providers opting to participate in ACO initiatives. In the post-ACO adoption period, hospitals that were part of jointly-led ACOs had the lowest cost growth, suggesting that this ACO structure may be the most effective.

PHS179 READMISSION PATTERNS IN MEDICARE BENEFICIARIES HOSPITALIZED FOR HEART FAILURE

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OBJECTIVES: Determine 30-day, 60-day and 90-day readmission pattern in patients hospitalized for heart failure (HF). **METHODS:** A 5% (n=3,493,434) national sample of Medicare beneficiaries was used to assess the frequency of all-cause readmission following an HF hospitalization. The data were restricted to individuals enrolled in fee-for-service Medicare (not in Medicare Advantage) who were hospitalized at least once with a primary diagnosis of HF between July 1, 2005 and December 31, 2011. For all HF hospitalizations observed during the study period, 30-, 60-, and 90-day all-cause readmission rates were calculated. For those hospitalizations that were followed by subsequent admissions, the median time to readmission was also calculated. **RESULTS:** During the study period, 82,825 individuals experienced a total of 134,328 HF hospitalizations. For those 134,328 episodes, 29,998 (22.3%) experienced all-cause readmission within 30 days of discharge. The median time to readmission was 14 days. The 60-day readmission rate increased to 33.3% (n=44,720). The results indicated that 40.2% of the episodes experienced readmission within 90-days and the median time to 90-day readmission was 37 days. **CONCLUSIONS:** Individuals hospitalized for HF are frequently readmitted. Approximately 1 in 4 hospitalizations will be followed by a readmission within 30 days, of which half would occur within 2 weeks.

DISEASE-SPECIFIC STUDIES

NEUROLOGICAL DISORDERS – Clinical Outcomes Studies

PND1 EFFECTIVENESS OF PHARMACOTHERAPY IN CHILDREN WITH SYMPTOMATIC EPILEPSY

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OBJECTIVES: Majority of the studies on epilepsy have been done on adults and few studies are available on children with symptomatic epilepsy (SE). This study aims to fill this gap by analyzing the effectiveness of anti epileptic drug (AED) therapy in children with SE. **METHODS:** Study was conducted in pediatric outpatient neurology clinic of public tertiary care hospital. Children aged 2-18 undergoing AED treatment \geq 3 months and diagnosed with SE were included. Effectiveness parameters included; complete seizure remission (CSR) for 2 years and adverse drug reactions (ADRs). Those children who achieved CSR for 2 years with normalization of electroencephalogram were eligible to stop AED treatment. Children were followed for 2 years. **RESULTS:** 123 children who completed the follow up were included; 73 (59%) were boys and mean (SD) age of children was 8.48 \pm 0.43 yrs. The major cause was Neurocysticercosis (NCC) in 77 (63%), followed by cryptogenic epilepsy 25 (20%), birth asphyxia 7 (6%), infection 4 (3%), congenital structural defects 3 (3%) tuberculoma 3 (2.4%) and stroke and hypocalcemia in 2 (1.6%) children each. 79 children (64%) were on monotherapy. 80 (65%) were prescribed phenytoin, 25 (20.3%) sodium valproate and 18 (15%) carbamazepine. 70 (57%) children were prescribed albendazole-prednisolone. At follow-up, 82 (67%) children had CSR but AED could be stopped in 62 (50%) only. ADRs were reported in 27 (22%) children. **CONCLUSIONS:** NCC is the major cause of symptomatic epilepsy in North India. The pharmacotherapy, primarily being phenytoin is well tolerated and efficacious in children with SE. Though two-third of the children had CSR only 50% were eligible to stop AED treatment. This study could serve as the basis to determine how the treatment of SE differs from idiopathic Epilepsy and whether or not a different approach is required to treat children.

PND2 COMPARATIVE STUDY OF THE INFLUENCE OF BIAPENEM AND MEROPENEM ON VALPROIC ACID BLOOD CONCENTRATION

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OBJECTIVES: Several studies have described a remarkable interaction between Meropenem and Valproic acid (VPA). However, there's no analysis has been conducted evaluating the influence of different carbapenems on VPA blood level. We sought to analyze the influence of Biapenem on VPA blood concentration and the risk of seizures. **METHODS:** We retrospectively collected the patients who concomitant administrated of VPA and Biapenem, Meropenem as the control group: Biapenem 37 cases and Meropenem 48 cases. Recorded the information as follows: general clinical data, medication, VPA concentration, seizures and treatment and so on. **RESULTS:** Both of Biapenem and Meropenem significantly decreased the VPA blood level. The lowest concentrations in Biapenem group were higher than Meropenem group ($P=0.046$). The mean decrease of VPA level in Biapenem group was also less than Meropenem group (70.65 \pm 9.64% vs 78.83 \pm 8.78%, $P=0.01$). There were six patients treated with Biapenem and Meropenem at different times of infection during taken the VPA. The low-